

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 E01C19/05

Rec'd PCT/PTO 07 OCT 2004

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 E01C B07B B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 358 966 A (SCHUSTER RUDOLF) 17 February 1978 (1978-02-17) the whole document	1, 4, 6-8
A	---	9
A	GB 2 309 653 A (CAIS LTD) 6 August 1997 (1997-08-06) the whole document	1, 4, 5
A	---	
A	US 3 812 889 A (STREHLOW R) 28 May 1974 (1974-05-28) the whole document	1, 6, 8, 9



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

26 February 2003

Date of mailing of the international search report

05/03/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Dijkstra, G

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2358966	A	17-02-1978	FR 2358966 A1	17-02-1978
GB 2309653	A	06-08-1997	IE 960064 A2	20-03-1996
US 3812889	A	28-05-1974	NONE	

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 E01C19/05

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 E01C B07B B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 358 966 A (SCHUSTER RUDOLF) 17 February 1978 (1978-02-17)	1, 4, 6-8
A	the whole document	9
A	GB 2 309 653 A (CAIS LTD) 6 August 1997 (1997-08-06)	1, 4, 5
A	US 3 812 889 A (STREHLOW R) 28 May 1974 (1974-05-28)	1, 6, 8, 9
	the whole document	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

26 February 2003

Date of mailing of the international search report

05/03/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Dijkstra, G

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2358966	A	17-02-1978	FR 2358966 A1	17-02-1978
GB 2309653	A	06-08-1997	IE 960064 A2	20-03-1996
US 3812889	A	28-05-1974	NONE	